

How should we measure ambulance service quality and performance?

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The Problem

Ambulance services in England treat 6.5million people per year but get no information about what happens to patients after discharge

The consequences

- 1) A reliance on measuring response times rather than outcomes to assess how well services perform
- 2) Little opportunity for identifying problems and good practice or evaluating service developments

The research gap

There is a lack of consensus on which outcome measures are important for pre-hospital care so we set out to address this within the PhOEBe research programme



Pre-hospital Outcomes for Evidence Based Evaluation

Study methods

We conducted a two round Delphi study to prioritise outcome measures identified from a systematic review and a multi-stakeholder consensus event. 20 participants scored 57 measures over two rounds. Participants included policy makers and commissioners, clinical ambulance service and ambulance service operational groups. Outcomes were scored in three categories: patient outcomes; whole service measures and clinical management

Results

Highly ranked patient outcome measures related to pain, survival, recontacts and patient experience. High ranking outcomes in the Clinical Management group related to compliance with protocols and guidelines and appropriateness and accuracy of triage. In the Whole Service measures group highly ranked measures related to completeness of clinical records, staff training and time to definitive care.

High scoring measures

- Proportion of category A calls correctly identified
- Proportion of patients who report pain who are given analgesia
- Proportion of all 999 calls referred for telephone advice only recontacting the ambulance service within 24 hours
- Proportion of cases that comply with end of life care, where these are available
- Time of call to time to definitive care
- Proportion of eligible calls who arrive at a specialist heart attack centre within 150 minutes
- Proportion of patients who report that key aspects of care were delivered e.g. reassurance, communication, professionalism
- Proportion of staff who comply with mandatory training requirements for basic and advanced life support (BLS, ALS)

Next steps

- Assess the public acceptability of the measures
- Identify which measures are suitable for measuring with routine data
- Use a linked dataset to build predictive models and determine what aspects of care can predict good or poor outcomes (mortality and non-mortality)
- Measure the effectiveness and quality of ambulance service care
- Assess the practical use of the measures and the linked data as a way to support quality improvement in the NHS

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